Shepherdia argentea Shrubland [Provisional]

COMMON NAME Silver Buffalo-berry Shrubland SYNONYM Buffaloberry Shrubland

PHYSIOGNOMIC CLASS Shrubland (III)

PHYSIOGNOMIC SUBCLASS Deciduous shrubland (III.B)
PHYSIOGNOMIC GROUP Cold-deciduous shrubland (III.B.2)
PHYSIOGNOMIC SUBGROUP Natural/Semi-natural (III.B.2.N)

FORMATION Temporarily flooded cold-deciduous shrubland (III.B.2.N.d)

ALLIANCE SHEPHERDIA ARGENTEA TEMPORARILY FLOODED SHRUBLAND ALLIANCE

CLASSIFICATION CONFIDENCE LEVEL 2

USFWS WETLAND SYSTEM

RANGE

Theodore Roosevelt National Park

The buffaloberry shrubland is scattered as small patches throughout the project area. It is usually best developed on sites grazed by domestic livestock. Stands occur as distinct patches on the upper slopes and shoulders of upland draws.

Globally

This community is found in Colorado, Wyoming, Montana, southern Saskatchewan, and possibly North Dakota.

ENVIRONMENTAL DESCRIPTION

Theodore Roosevelt National Park

Silver buffalo-berry shrublands appear most frequently on north and east facing upper slopes and shoulders of upland draws. In some cases, the shrubland forms the upper slope boundary between the *Fraxinus pennslyvanica* (*Ulmus americana*) Woodland and the upland grasslands. The density of *Shepherdia argentea* appears to increase on sites outside Theodore Roosevelt National Park that are grazed by cattle.

Globally

This community is found on stream terraces, rolling uplands, and badlands. It occurs where moisture is more plentiful than on the surrounding landscape, such as in swales, ravines, near streams, and on northwest to east facing slopes (Hansen and Hoffman 1988, DeVelice *et al.* 1995). This trend is more pronounced in Wyoming where Jones and Walford (1995) only found this community near streams and may be less pronounced in Saskatchewan and northern Montana. Soils are loamy sand, sandy loam, silty loam, or loam and are derived from glacial drift, siltstone, or sandstone (USFS 1992, DeVelice *et al.* 1995). This community does not flood often, but some sites show evidence of a high water table (DeVelice *et al.* 1995).

MOST ABUNDANT SPECIES

Theodore Roosevelt National Park

<u>Stratum</u> <u>Species</u>

Tree Fraxinus pennsylvanica

Shrub Shepherdia argentea, Symphoricarpos occidentalis, Prunus virginiana

Herbaceous Poa pratensis, Pascopyrum smithii

Globally

<u>Stratum</u> <u>Species</u>

Shrub Shepherdia argentea

CHARACTERISTIC SPECIES

Theodore Roosevelt National Park

Shepherdia argentea

Globally

Shepherdia argentea

VEGETATION DESCRIPTION

Theodore Roosevelt National Park

Shepherdia argentea is the dominant shrub usually about 2 m in height and occurring in distinct patches on the upper slopes and shoulders of upland draws. In some cases, shrub density and over is relatively high making the stands almost impenetrable by large animals. The secondary species associated with *Shepherdia argentea* often reflects a combination of species from adjacent

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communities (both upland draws and grasslands, for example). The number of shrub species occurring in the shrub layer is often fairly high, with *Symphoricarpos occidentalis* as the most frequent associate. The herbaceous understory is also quite diverse with no obvious dominant species.

Globally

This community is dominated by a moderate to dense canopy of medium-tall shrubs. The most abundant of these, *Shepherdia argentea*, is typically 1.5-3 m tall. Other species commonly found in the shrub layer are *Juniperus horizontalis*, *Prunus virginiana*, *Ribes spp.*, *Rhus aromatica*, *Rosa woodsii*, and *Symphoricarpos occidentalis*. Herbaceous species are not important in this community. Graminoids and forbs may have only half the coverage of the shrub layer (Hansen and Hoffman 1988, USFS 1992). Graminoids include *Poa pratensis*, *Pascopyrum smithii*, and *Bromus* spp. Common forbs are *Achillea millefolium*, *Artemisia ludoviciana*, and *Parietaria pennsylvanica*. Litter may accumulate in this community (DeVelice et al. 1995).

CONSERVATION RANK G3G4. The number of occurrences is unknown. The community is reported from Montana (where it is ranked S3?), Wyoming (?), Colorado (S1), Saskatchewan (S?), and possibly North Dakota (SP).

DATABASE CODE CEGL001128

SIMILAR ASSOCIATIONS

Fraxinus pennsylvanica - Ulmus americana / Prunus virginiana Woodland (The similarity is based on overall composition, but there are few *Fraxinus pennsylvanica* individuals in CEGL001128.)

COMMENTS

Livestock and deer frequent these thickets and and establish numerous trails throughout. The disturbances open the stands for the invasion of such species as *Symphoricarpos occidentalis, Toxicodendron rydbergii, Achillea millefolium*, and *Artemisia ludovicia*.

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